

In the Claims:

Please rewrite claims 1, 16, 26, 36, 46 and 51 in amended form as follows:

1. (Twice Amended) An apparatus for defining a direction of approach to a subsurface target along a predetermined path for use with imaging equipment, the subsurface target being located [within a body having an external] below a surface, the apparatus comprising:

a support structure [located in spaced relation to the external surface of the body and] carrying a plurality of fiducials defining the predetermined path relative to the support structure, the support structure having a size and shape locating the fiducials outwardly of the surface and defining an air gap between the fiducials and the surface; and

a visible light source generating a visible light beam traveling along the predetermined path and being indicative of a direction of approach to the subsurface target.

16. (Twice Amended) A system for defining a direction of approach to a subsurface target by illuminating a predetermined path with a visible light beam, the subsurface target being located [within a body having an external] below a surface, the system comprising:

an imaging machine having an image plane, the image plane having a plurality of degrees of freedom;

-3-

a support structure [located in spaced relation to the external surface of the body and] having at least one rotational and at least two translational degrees of freedom;

at least two fiducials mounted on the support structure and situated in the image plane, the support structure having a size and shape locating the fiducials outwardly of the surface and defining an air gap between the fiducials and the surface; and

a visible light source generating the visible light beam traveling along the predetermined path and illuminating the path as a direction of approach to the subsurface target.

26. (Twice Amended) A system for defining a direction of approach to a subsurface target by illuminating a predetermined path with a visible light beam in an imaging machine, the subsurface target being located [within a body having an external] below a surface, the system comprising:

a support structure [located in spaced relation to the external surface of the body and] having a plurality of fiducials defining the predetermined path relative to the support structure, the support structure having a size and shape locating the fiducials outwardly of the surface and defining an air gap between the fiducials and the surface;

a visible light source generating the visible light beam traveling along the path and illuminating the path as a direction of approach to the subsurface target; and

-4-

a computer-based system for executing a set of procedures serving to select the predetermined path by determining an optimal path to the subsurface target.

Claim 31, on line one change "62" to -- 26 --.

36. (Twice Amended) A method of determining a path to a subsurface target for use with imaging equipment having an image plane and an output device, the subsurface target being located [within a body having an external] below a surface, the method comprising the steps of:

supporting a plurality of fiducials [in spaced relation to the external surface of the body and] situated in the image plane, the fiducials being located outwardly of the surface in a manner defining an air gap between the fiducials and the surface;

observing positions of images of the plurality of fiducials in the output device; and

utilizing the positions of the images of the plurality of fiducials to determine the path to the subsurface target.

46. (Twice Amended) A method of selecting a desired location of a subsurface target in an imaging machine having an output device for use with an apparatus comprising a plurality of fiducials carried by a support structure, the subsurface target being located [within a body having an external] below a surface, the method comprising:

-5-

positioning the support structure [in spaced relation to the external surface of the body] to locate the fiducials outwardly of the surface in a manner defining an air gap between the fiducials and the surface;

positioning the subsurface target relative to the apparatus in the imaging machine such a way that an image of the subsurface target and images of the plurality of fiducials can be observed on the output device and a location of the image of the subsurface target relative to the images of fiducials can be determined; and

repositioning the plurality of fiducials so that a new location of the image of the subsurface target relative to the images of the plurality of fiducials is the desired location.

51. (Twice Amended) A method of positioning an apparatus for determining a direction of approach to a subsurface target in an imaging machine, the subsurface target being located [within a body having an external] below a surface, the imaging machine comprising an image plane having a plurality of degrees of freedom, the method comprising the steps of:

providing a support structure having at least one rotational and at least two translational degrees of freedom;

providing at least two fiducials carried by the support structure;

-6-

positioning the support structure [in spaced relation to the external surface of the body] to locate the fiducials outwardly of the surface in a manner defining an air gap between the fiducials and the surface; and

positioning the fiducials in the image plane of the imaging machine by moving the support structure along its at least one degree of freedom.